

FIG. 1

00000000000000000000000000000000

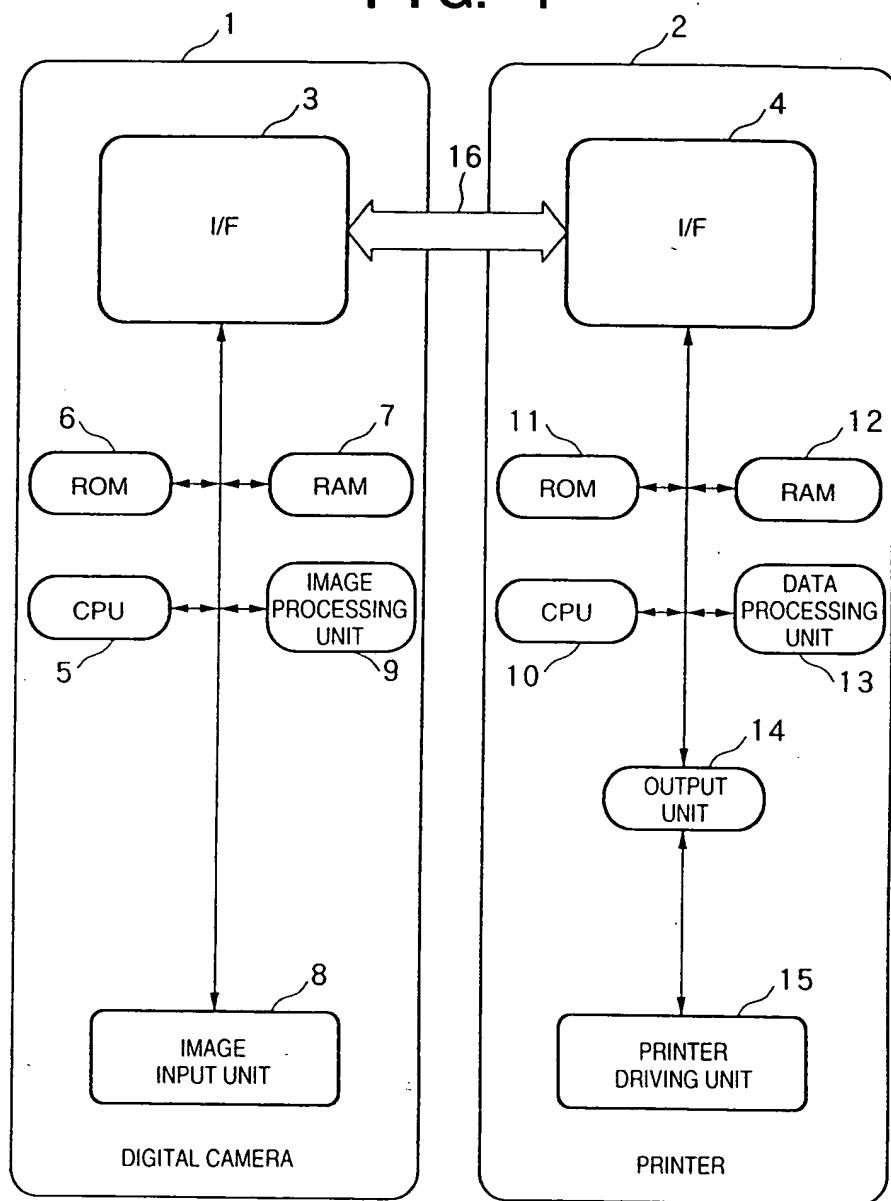


FIG. 2

DO NOT ERECT "EFFECTIVENESS"

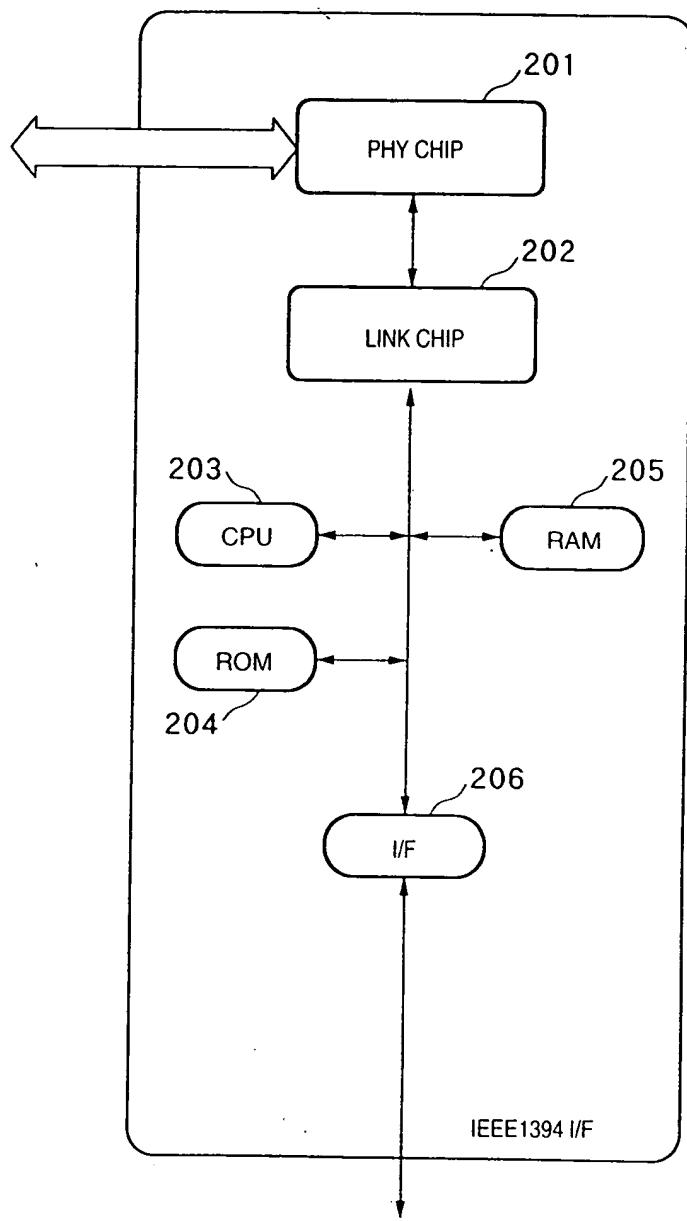
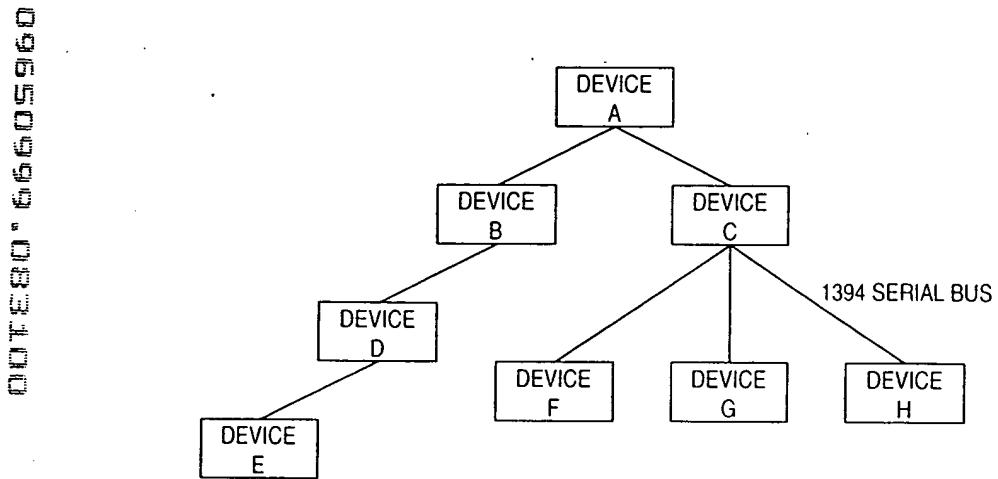
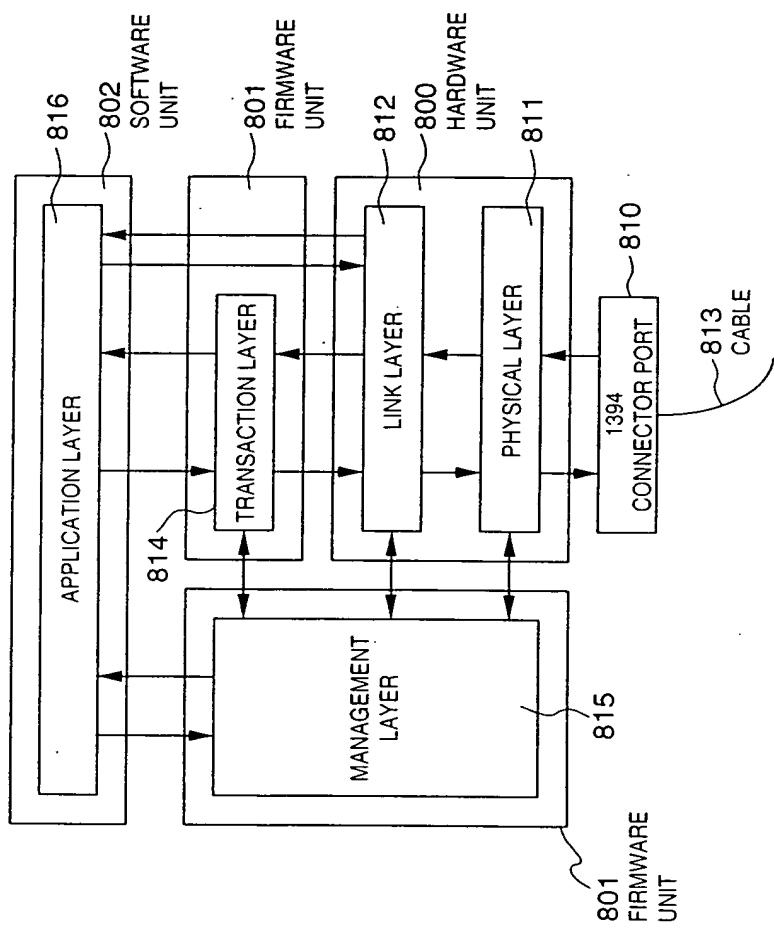


FIG. 3



001 E 200 " 66605960

FIG. 4



CONTENTS OF FIGURE 5

FIG. 5

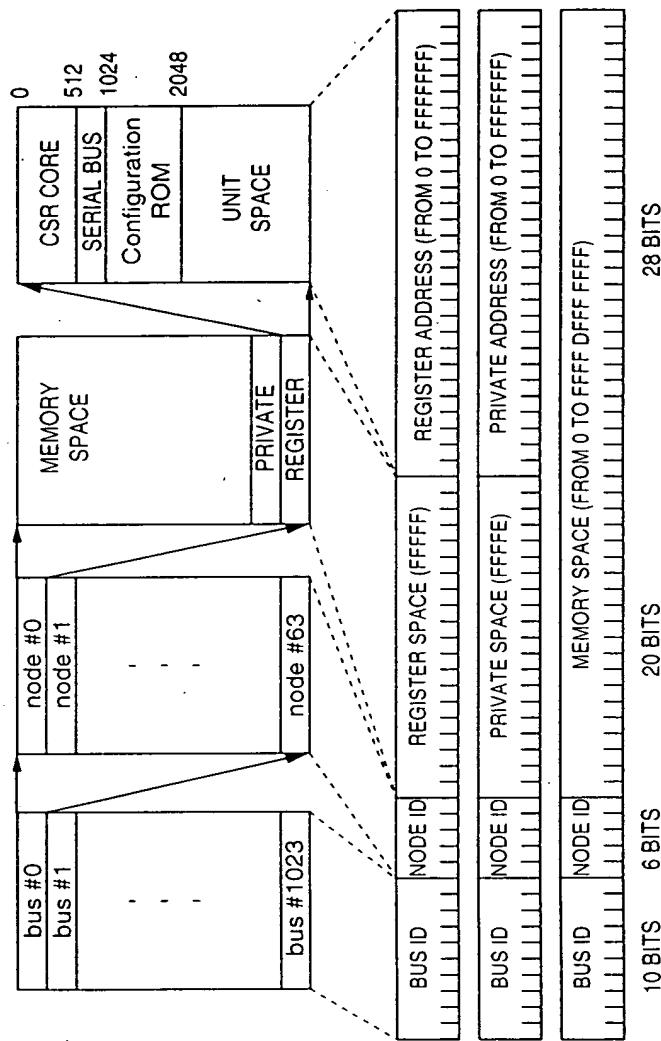
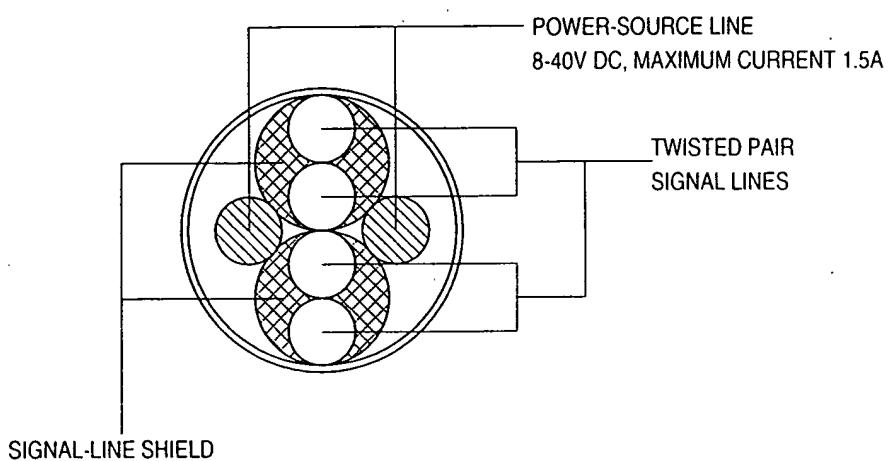


FIG. 6

CROSS-SECTION OF CABLE



DDITE 301-15650560

NOTE FOR 00-665505960

FIG. 7

CLOCK : EXCLUSIVE-OR SIGNAL BETWEEN Data AND Strobe

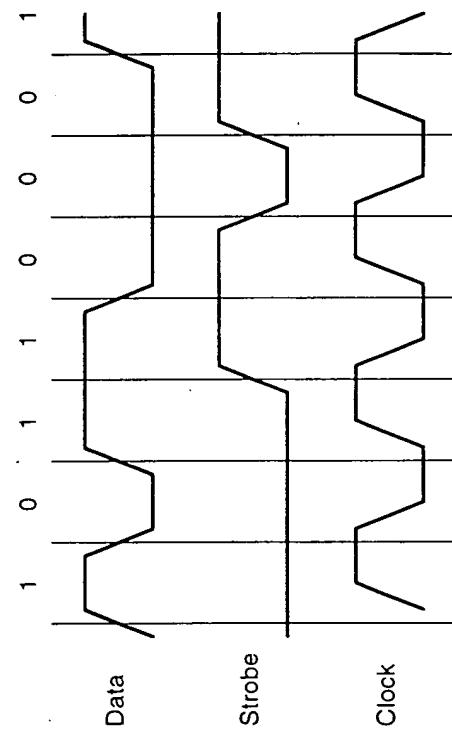


FIG. 8

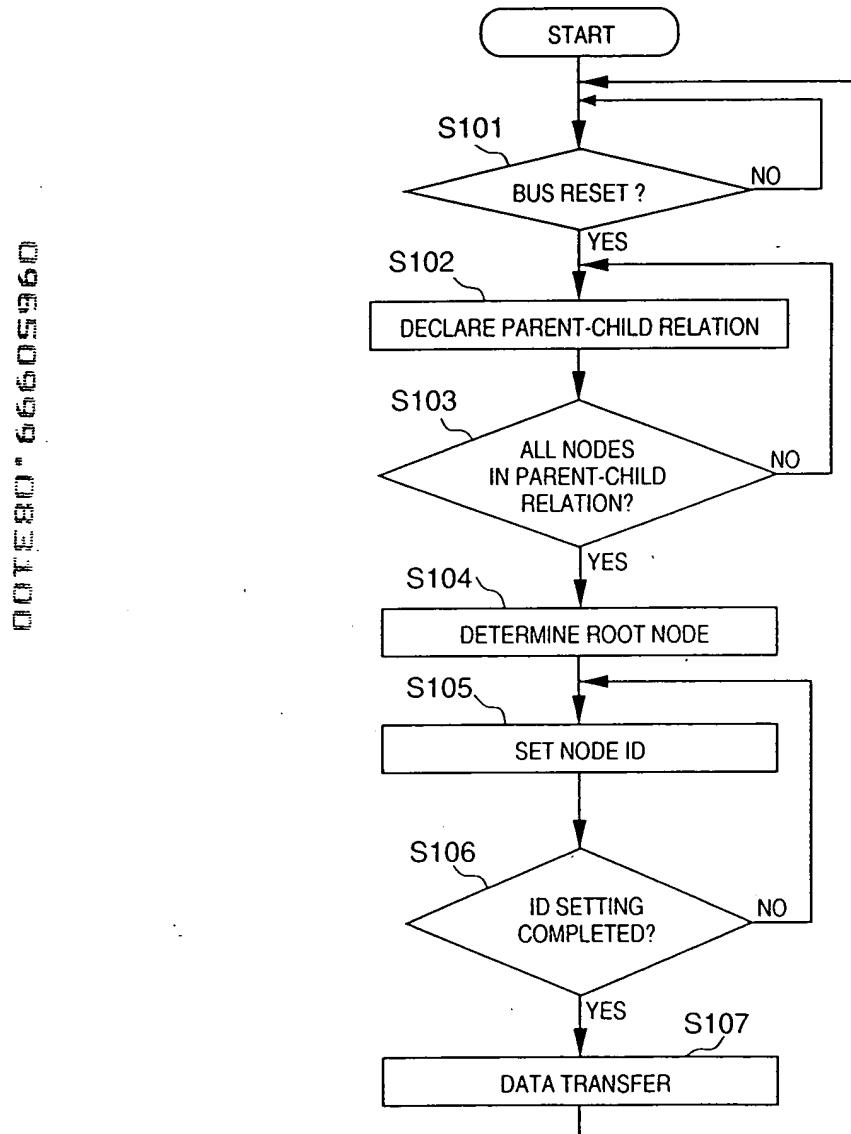


FIG. 9

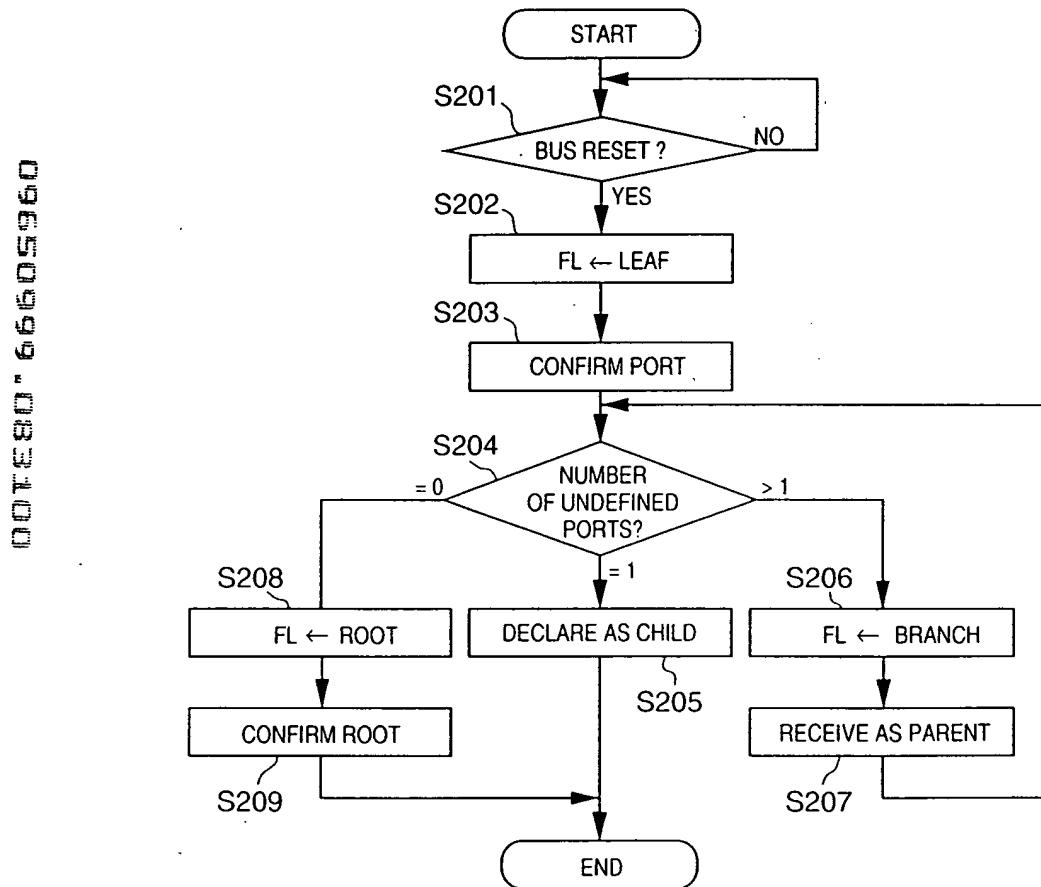


FIG. 10

10/36

0072010 661515360

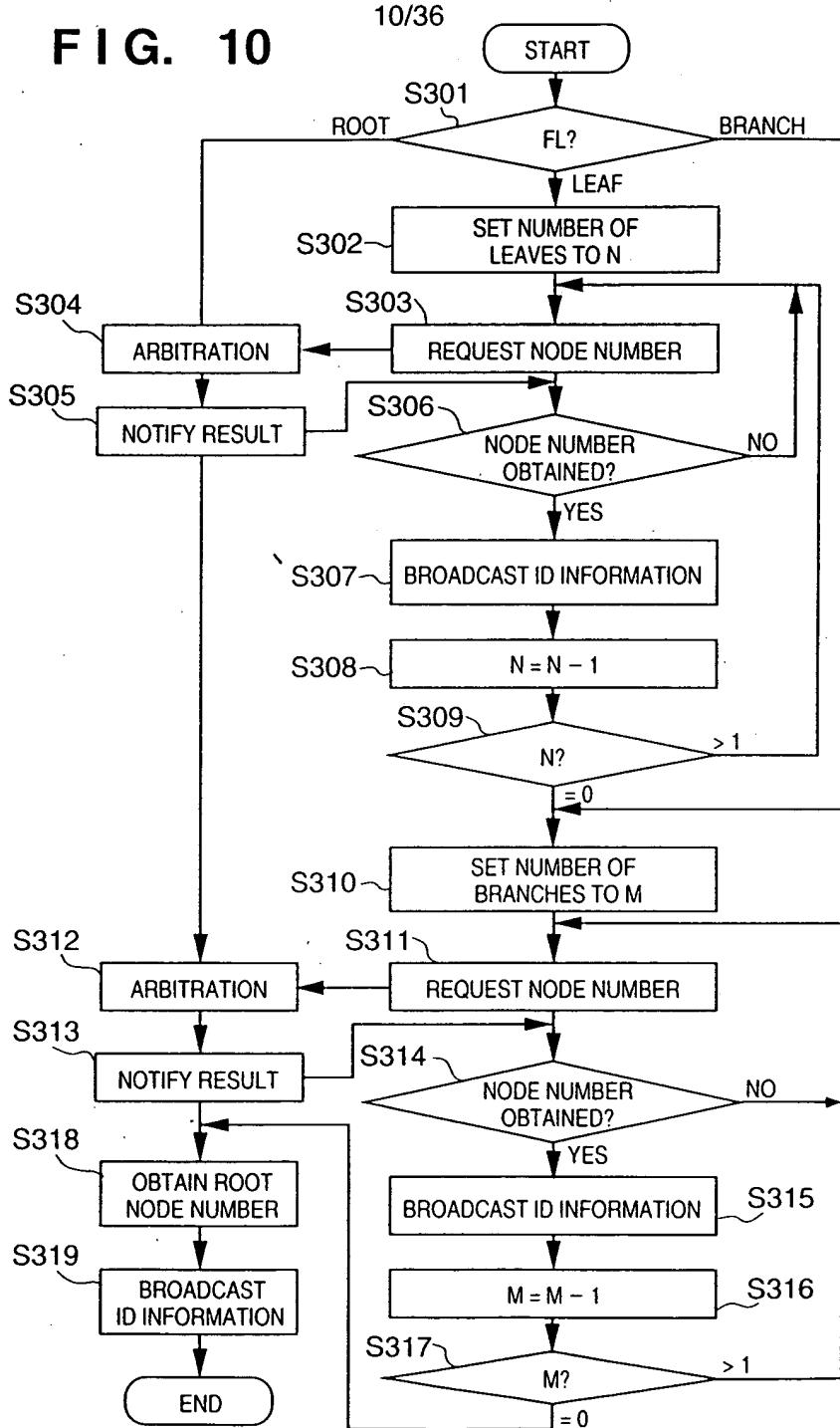
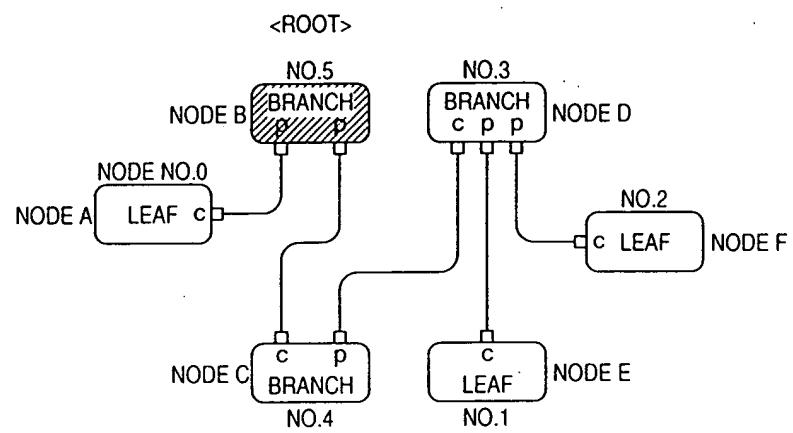


FIG. 11

FIGURE 11
DESCRIBES A
BINARY SEARCH TREE



BRANCH : NODE WITH TWO OR MORE NODE CONNECTIONS

LEAF : NODE WITH SINGLE PORT CONNECTION

: PORT

c : PORT CORRESPONDING TO CHILD NODE

p : PORT CORRESPONDING TO PARENT NODE

12/36

FIGURE 12 "Registers"

FIG. 12
CSR CORE REGISTER

OFFSET (hexadecimal)	REGISTER NAME	FUNCTION
000	STATE_CLEAR	INFORMATION ON STATUS AND CONTROL
004	STATE_SET	INFORMATION ON WRITE ENABLE/DISABLE STATUS OF STATE_CLEAR
008	NODE_IDS	BUS ID + NODE ID
00C	RESET_START	TO RESET BUS BY WRITING INTO THIS AREA
010~014	INDIRECT_ADDRESS, INDIRECT_DATA	REGISTER TO ACCESS ROM AREA GREATER THAN 1KB
018~01C	SPLIT_TIMEOUT	TIMER VALUE TO DETECT TIME-OUT OF SPLIT TRANSACTION
020~02C	ARGUMENT,TEST_START, TEST_STATUS	REGISTER FOR DIAGNOSIS
030~04C	UNITS_BASE,UNITS_BOUND, MEMORY_BASE,MEMORY_BOUND	NOT INSTALLED IN IEEE 1394
050~054	INTERRUPT_TARGET, INTERRUPT_MASK	REGISTER OF INTERRUPTION NOTIFICATION
058~07C	CLOCK_VALUE,CLOCK_TICK_PERIOD, CLOCK_STROBE_ARRIVED, CLOCK_INFO	NOT INSTALLED IN IEEE 1394
080~0FC	MESSAGE_REQUEST, MESSAGE_RESPONSE	REGISTER FOR MESSAGE NOTIFICATION
100~17C		RESERVATION
180~1FC	ERROR_LOG_BUFFER	TO RESERVE FOR IEEE 1394

NOTE \$10 "166605960

FIG. 13
SERIAL BUS REGISTER

OFFSET (hexadecimal)	REGISTER NAME	FUNCTION
200	CYCLE_TIME	COUNTER FOR ISOCHRONOUS TRANSFER
204	BUS_TIME	REGISTER FOR TIME SYNCHRONIZATION
208	POWER_FAIL_IMMINENT	REGISTER RELATING TO POWER SUPPLY
20C	POWER_SOURCE	TO CONTROL RETRY IN TRANSACTION LAYER
210	BUSY_TIMEOUT	RESERVATION
214~218		
21C	BUS_MANAGER_ID	NODE ID OF BUS MANAGER
220	BANDWIDTH_AVAILABLE	TO MANAGE ISOCHRONOUS TRANSFER BAND
224~228	CHANNELS_AVAILABLE	TO MANAGE CHANNEL NUMBER FOR ISOCHRONOUS TRANSFER
22C	MAINT_CONTROL	REGISTER FOR DIAGNOSIS
230	MAINT.Utility	RESERVATION
234~3FC		

DATE 01" 06/05/960

FIG. 14

SERIAL-BUS NODE RESOURCE REGISTER

OFFSET (hexadecimal)	REGISTER NAME	FUNCTION
800-FFC		RESERVATION
1000-13FC	TOPOLOGY-MAP	INFORMATION ON SERIAL BUS STRUCTURE
1400-1FFC		RESERVATION
2000-2FFC	SPEED-MAP	INFORMATION ON TRANSFER SPEED OF SERIAL BUS
3000-FFFFC		RESERVATION

FIG. 15

MINIMUM FORMAT CONFIGURATION ROM

01	VENDOR ID
----	-----------

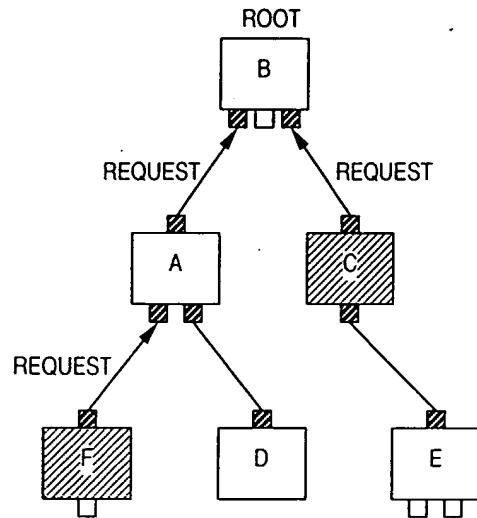
NOTEBOOK "66605960"

FIG. 16

GENERAL FORMAT CONFIGURATION ROM

LENGTH OF bus_info_block	LENGTH OF ROM	CRC
bus_info_block (ASCII CODE OF 1394 BUS AND INFORMATION ON WHETHER OR NOT NODE HAS CAPABILITIES OF ISOCHRONOUS RESOURCE MANAGEMENT, CYCLE MASTER, AND BUS MANAGEMENT)		
root_directory (INDICATE VENDOR ID AND NODE FUNCTION)		
unit_directories (INDICATE UNIT TYPE AND DRIVER SOFT VERSION)		
	root & unit_leaves	
		vendor_dependent_information

FIG. 17
REQUESTS FOR BUS ACCESS



007E301-666055610

FIG. 18

BUS ACCESS GRANTED

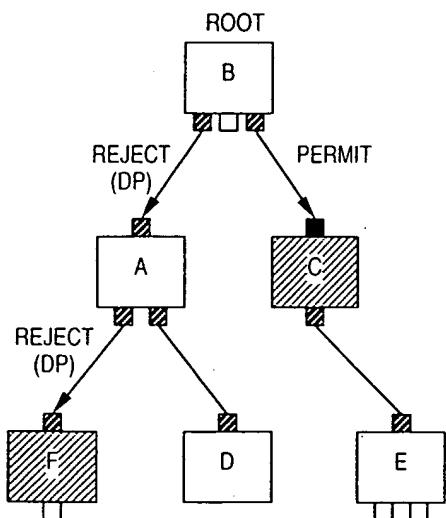
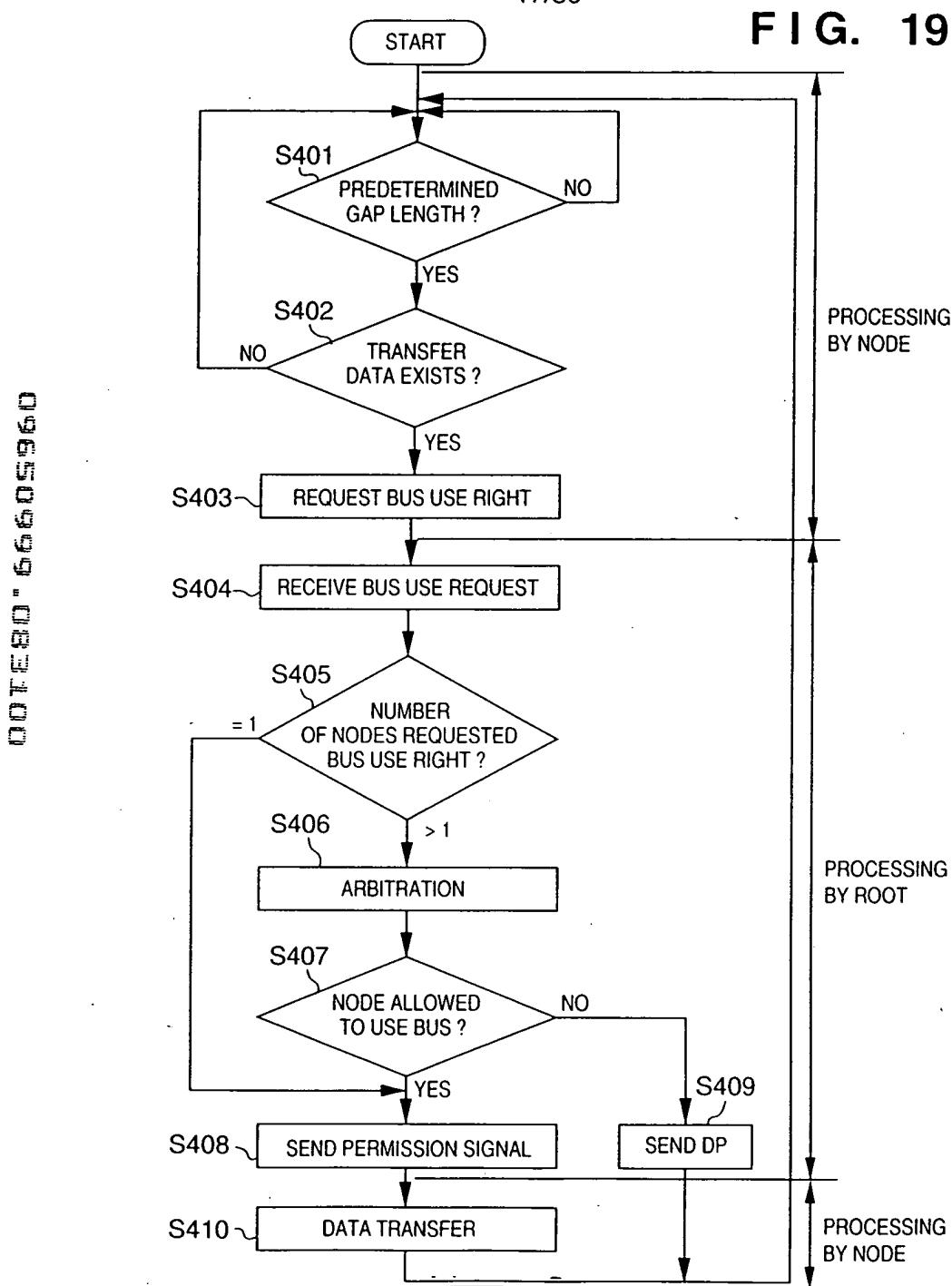
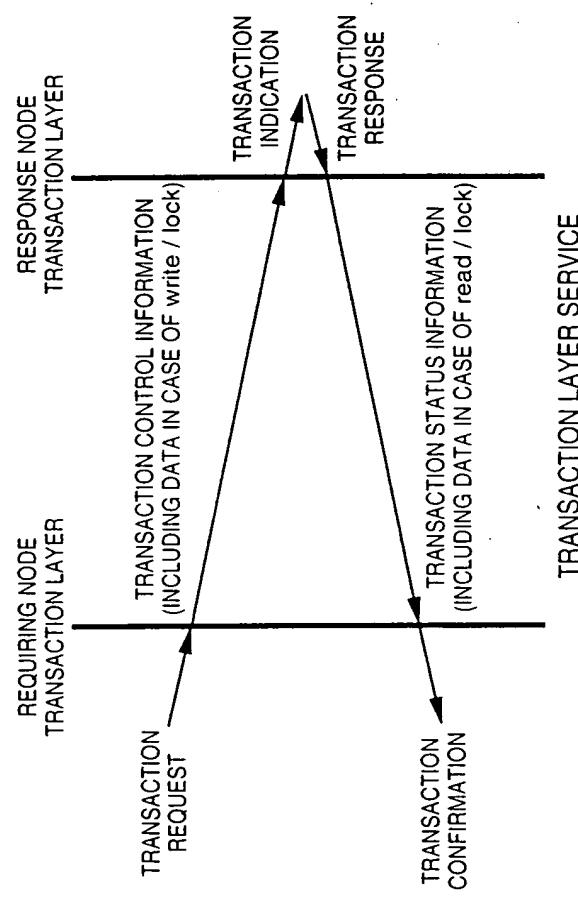


FIG. 19



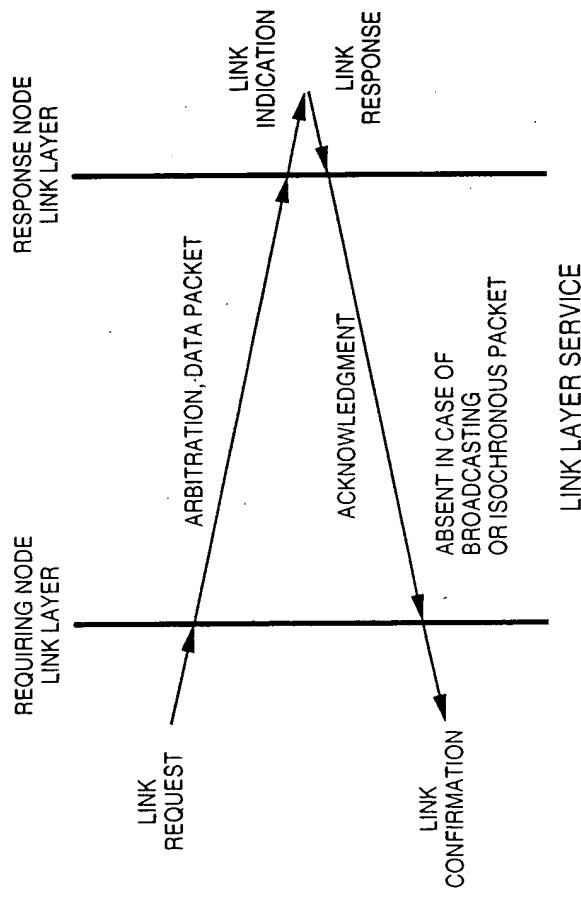
DATE 80 " 6605960

FIG. 20



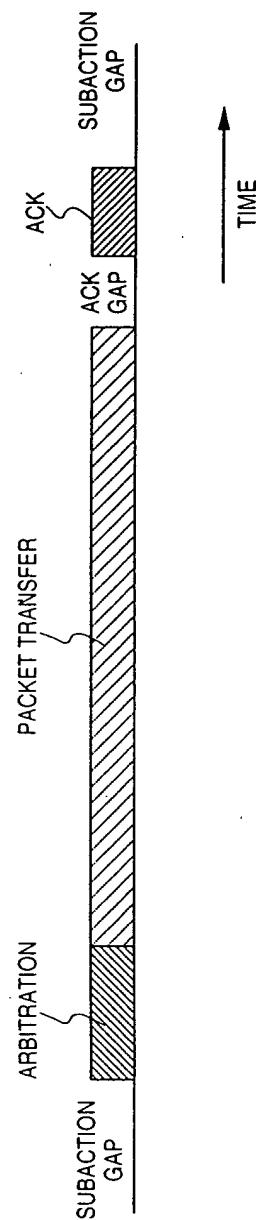
NOTE 80 " 66605560

FIG. 21



DATE 010 " 66605960

FIG. 22



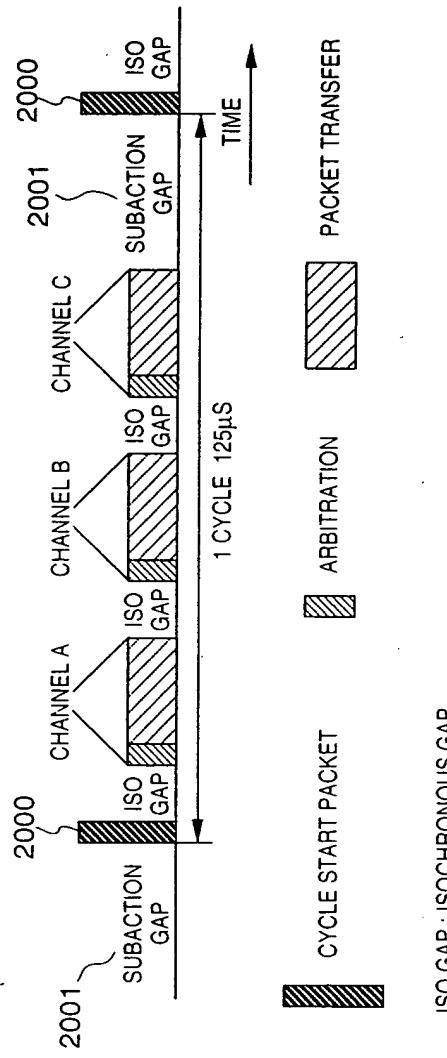
DATE 07/05/96

FIG. 23

destination_ID	t0	t1	tcode	pri
source_ID				
destination_offset				
data_length			extended_tcode	
			header_CRC	
			data_field	
			pad_field	
			data_CRC	

001E310 " 66005960

FIG. 24



ISO GAP : ISOCHRONOUS GAP

FIGURE 11 "Synchronous"

FIG. 25

ISOCHRONOUS DATA PACKET

data_length	tag	channel	tcode	sy
	header_CRC			
	data_field			
	pad_field			
	data_CRC			

FIG. 26

NOTE 80 "66505560"

ABBREVIATION	NAME	CONTENT
destination_ID	destination identifier	ID OF DESTINATION NODE (ASYNCHRONOUS ONLY)
t@	transaction label	LABEL INDICATING A SERIES OF TRANSACTIONS (ASYNCHRONOUS ONLY)
rt	retry code	CODE INDICATING RETRANSMISSION STATUS (ASYNCHRONOUS ONLY)
tcode	transaction code	CODE INDICATING PACKET TYPE (ASYNCHRONOUS ONLY)
pri	priority	PRIORITY ORDER (ASYNCHRONOUS ONLY)
source_ID	source identifier	SOURCE NODE (ASYNCHRONOUS ONLY)
destination_offset	destination memory address	MEMORY ADDRESS OF DESTINATION NODE (ASYNCHRONOUS ONLY)
rcode	response code	RESPONSE STATUS (ASYNCHRONOUS ONLY)
quadiet_data	quadiet (4bytes) data	4-BYTE LENGTH DATA (ASYNCHRONOUS ONLY)
data_length	length of data	LENGTH OF data_field (EXCEPT pad bytes)
extended_tcode	extended transaction code	EXTENDED TRANSACTION CODE (ASYNCHRONOUS ONLY)
chanel	isochronous identifier	IDENTIFICATION OF ISOCHRONOUS PACKET
sy	synchronization code	SYNCHRONIZATION OF VIDEO IMAGE AND AUDIO INFORMATION
cycle_time_data	contents of the CYCLE_TIME register	CYCLE TIMER REGISTER VALUE OF CYCLE MASTER NODE (CYCLE PACKET ONLY)
data_field	data + pad bytes	DATA STORAGE (ISOCHRONOUS AND ASYNCHRONOUS)
header_CRC	CRC for header field	CRC FOR HEADER
data_CRC	CRC for data field	CRC FOR DATA
tag	tag label	ISOCHRONOUS PACKET FORMAT

DATE 80 " 16 SEP 1980

FIG. 27

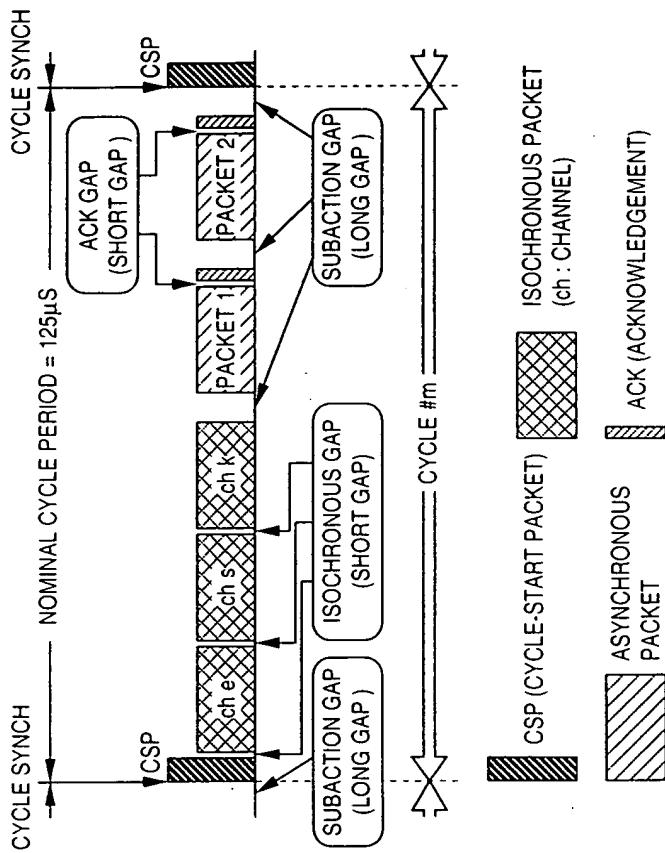


FIG. 28

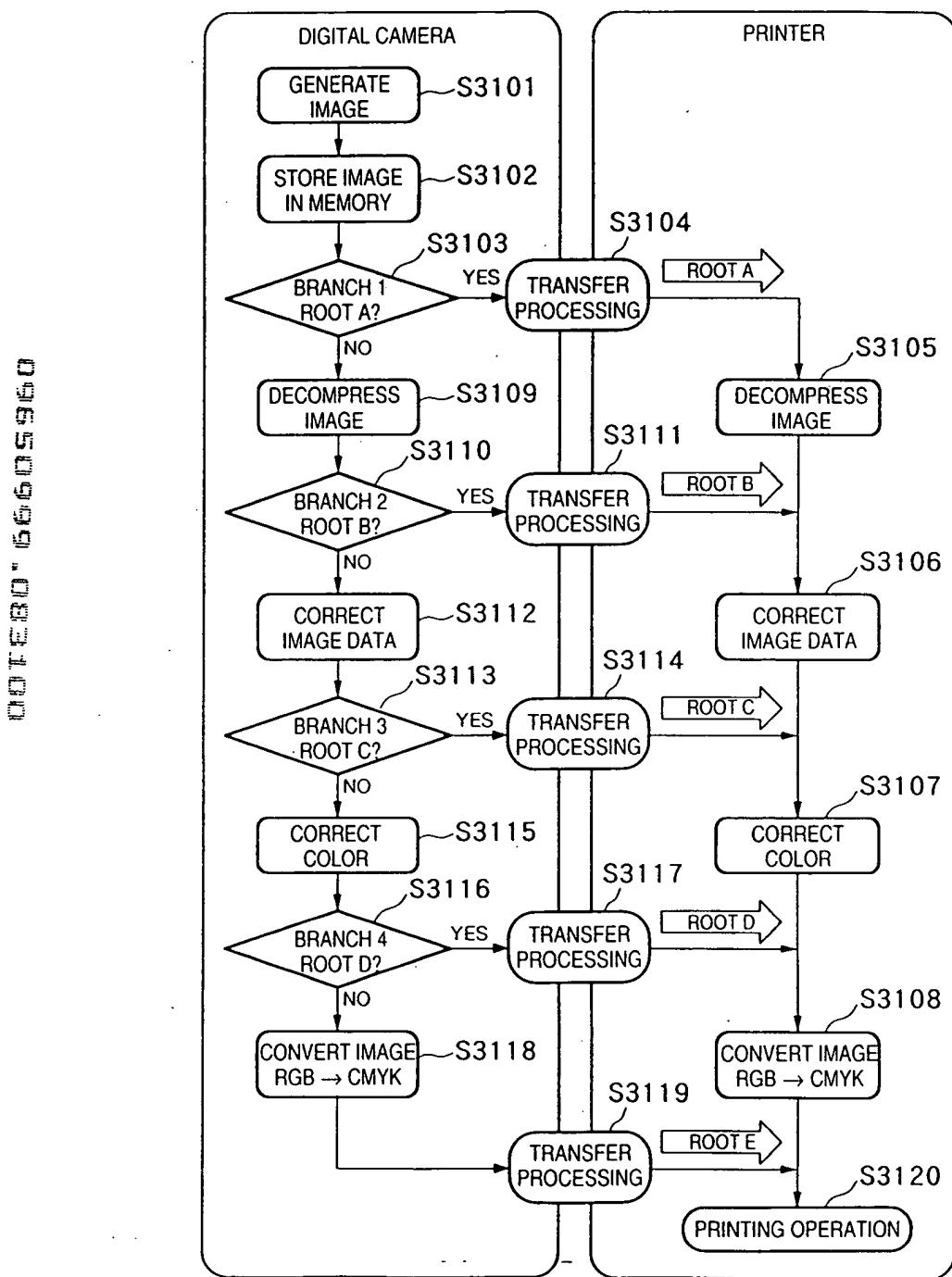
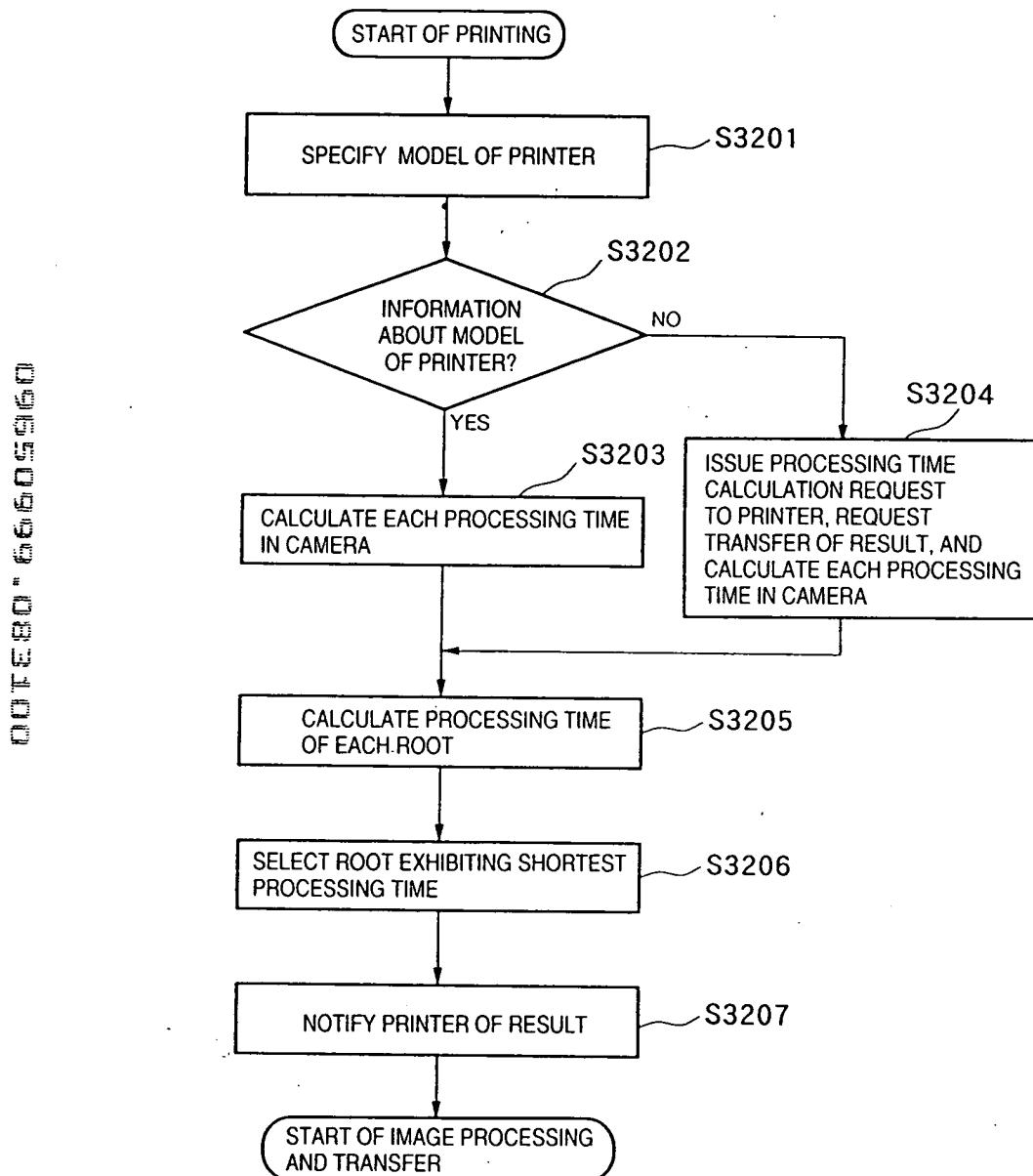


FIG. 29



F I G. 30

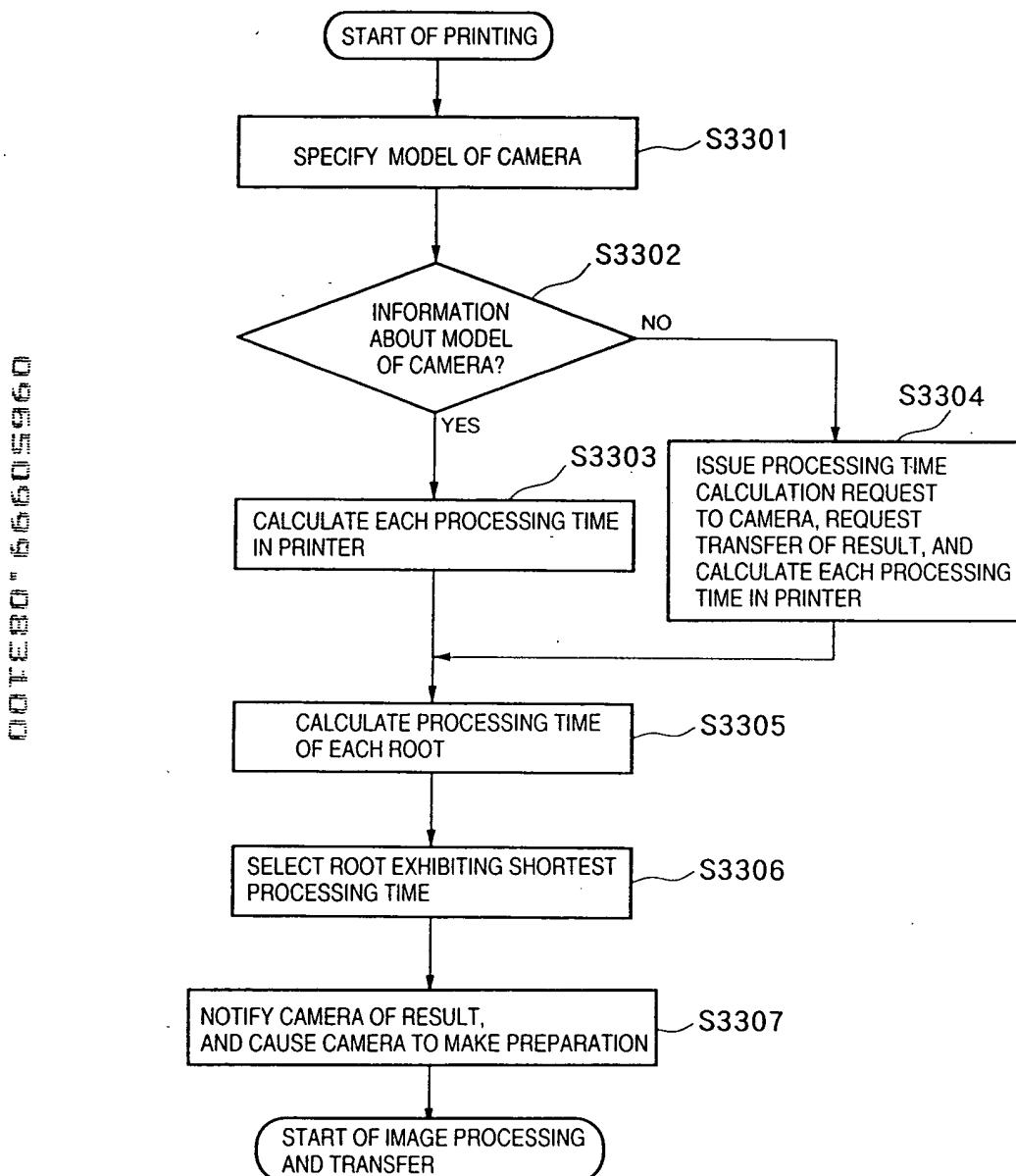


FIG. 31

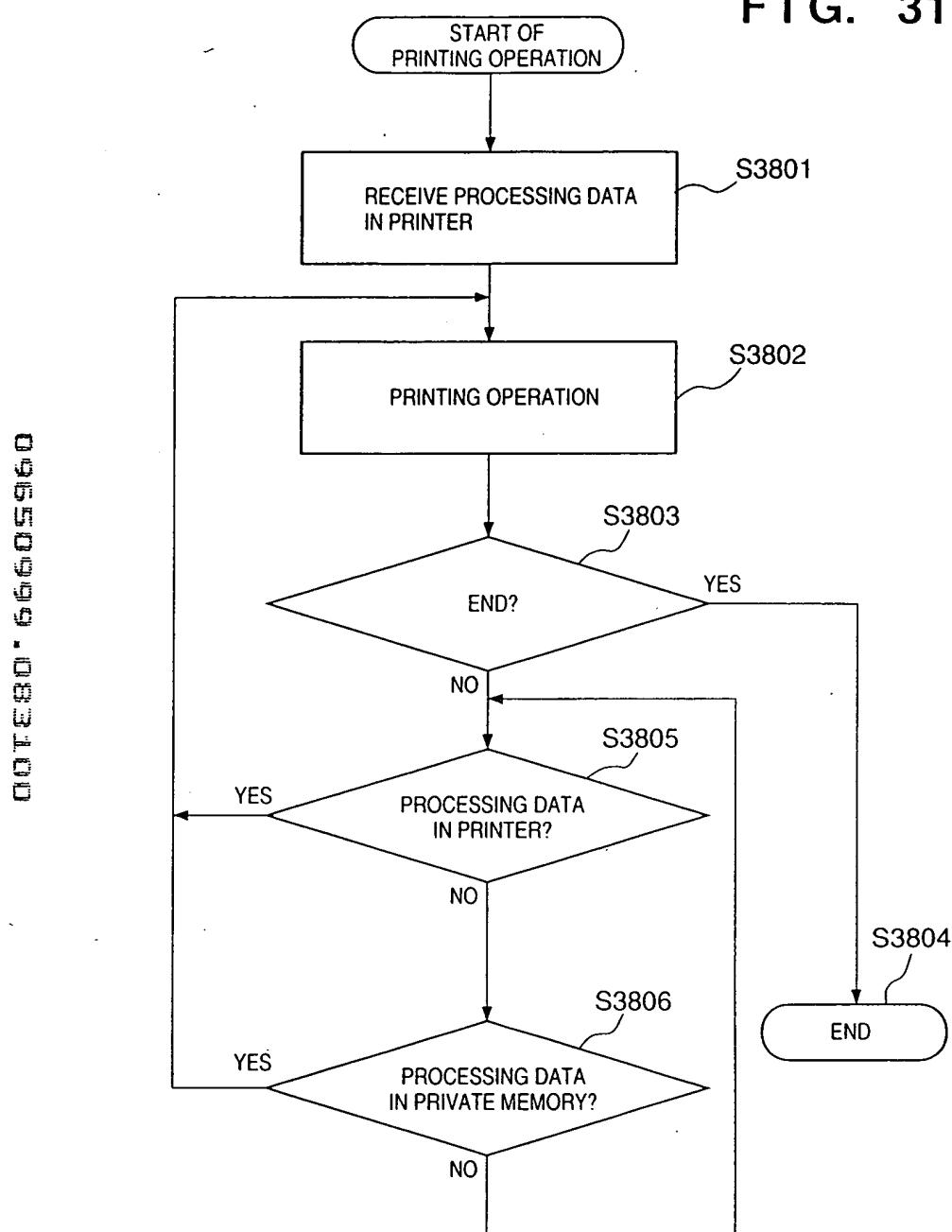


FIG. 32

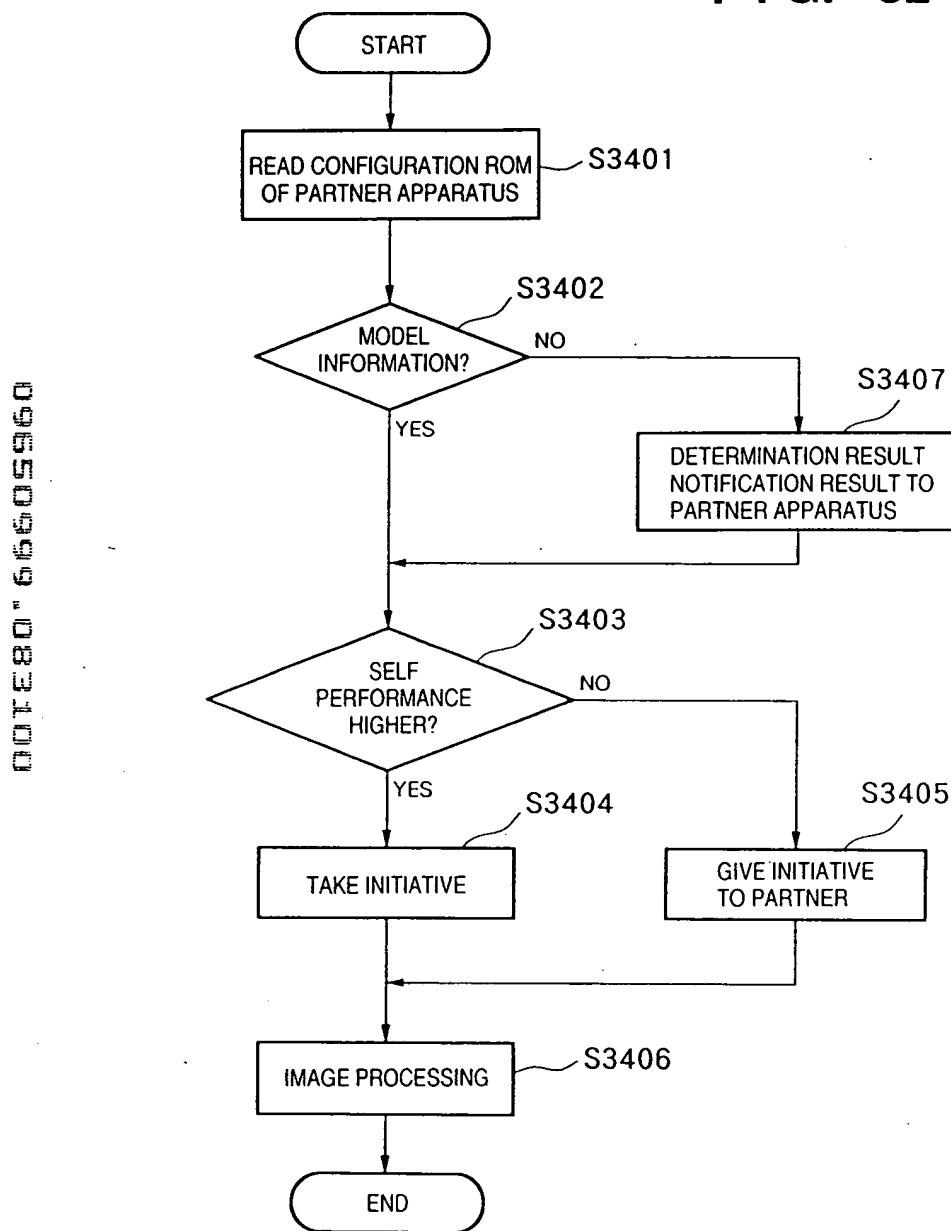


FIG. 33A

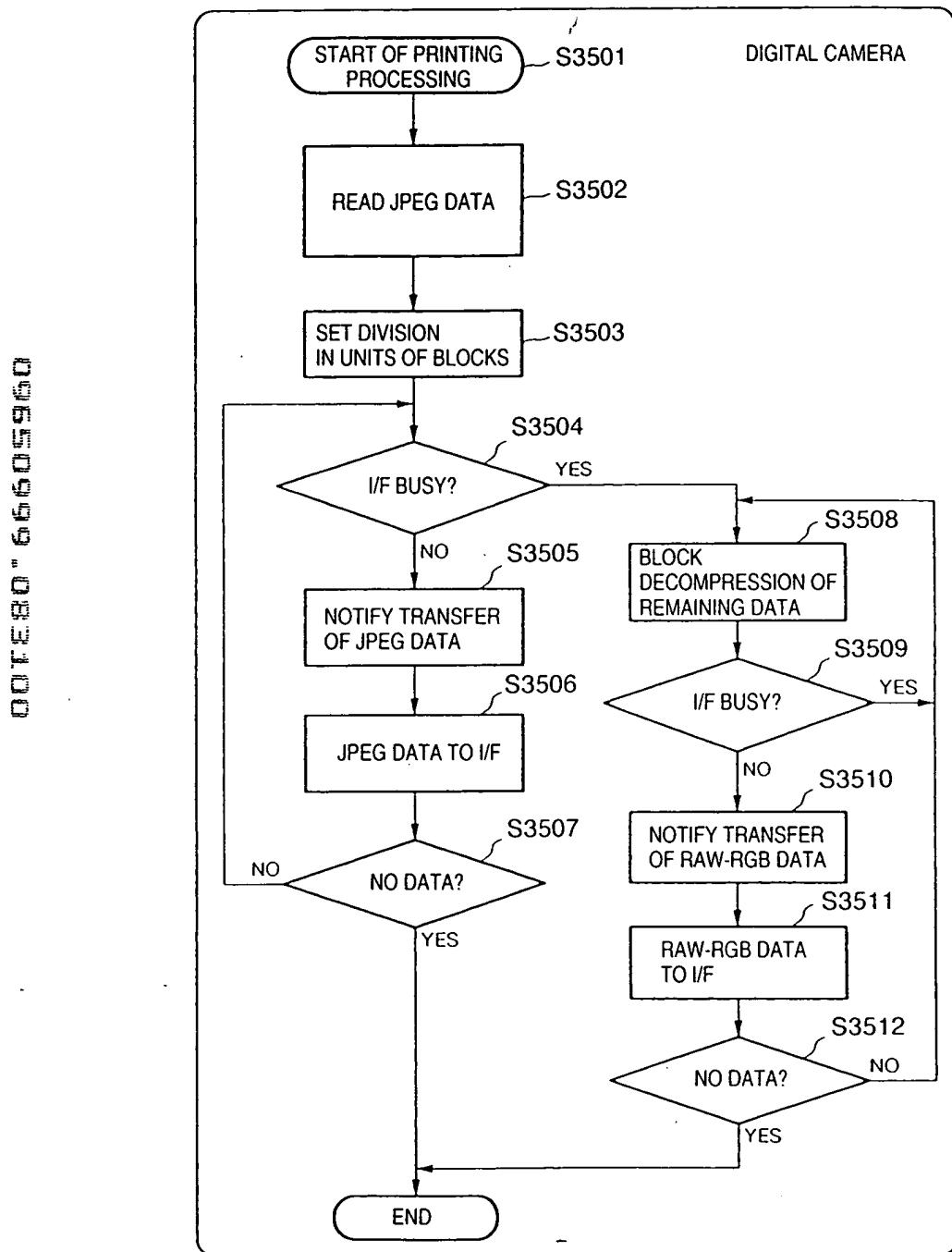


FIG. 33B

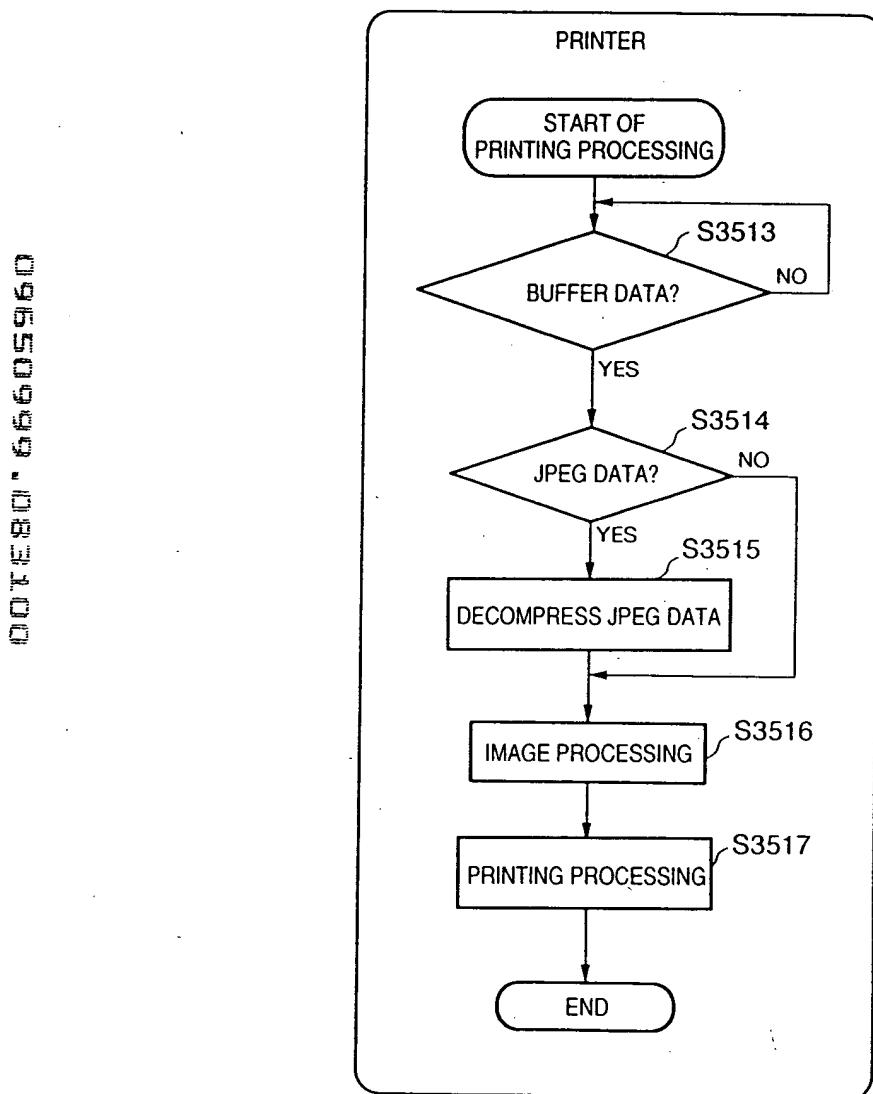


FIG. 34A

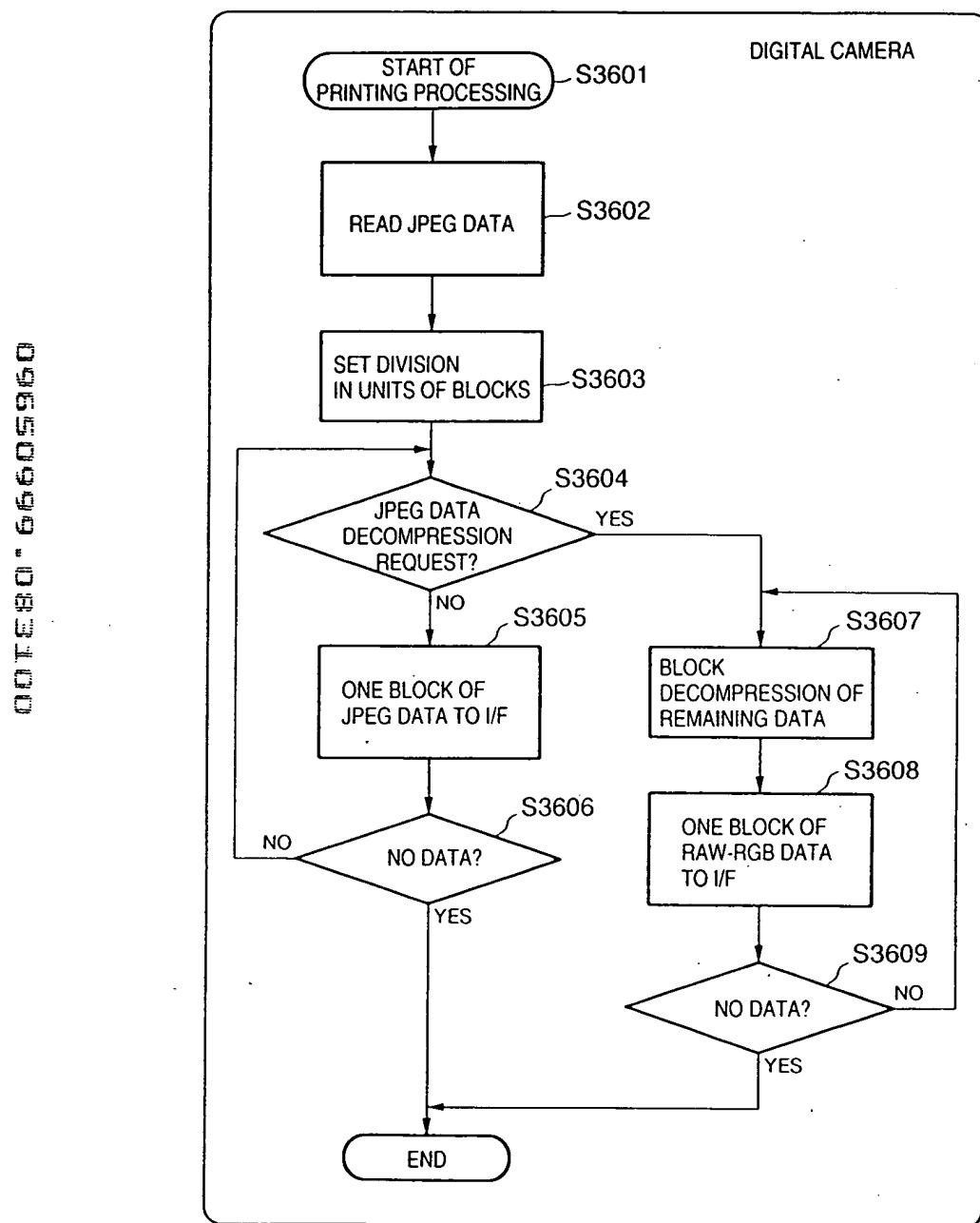


FIGURE 34B: PRINTING PROCESS

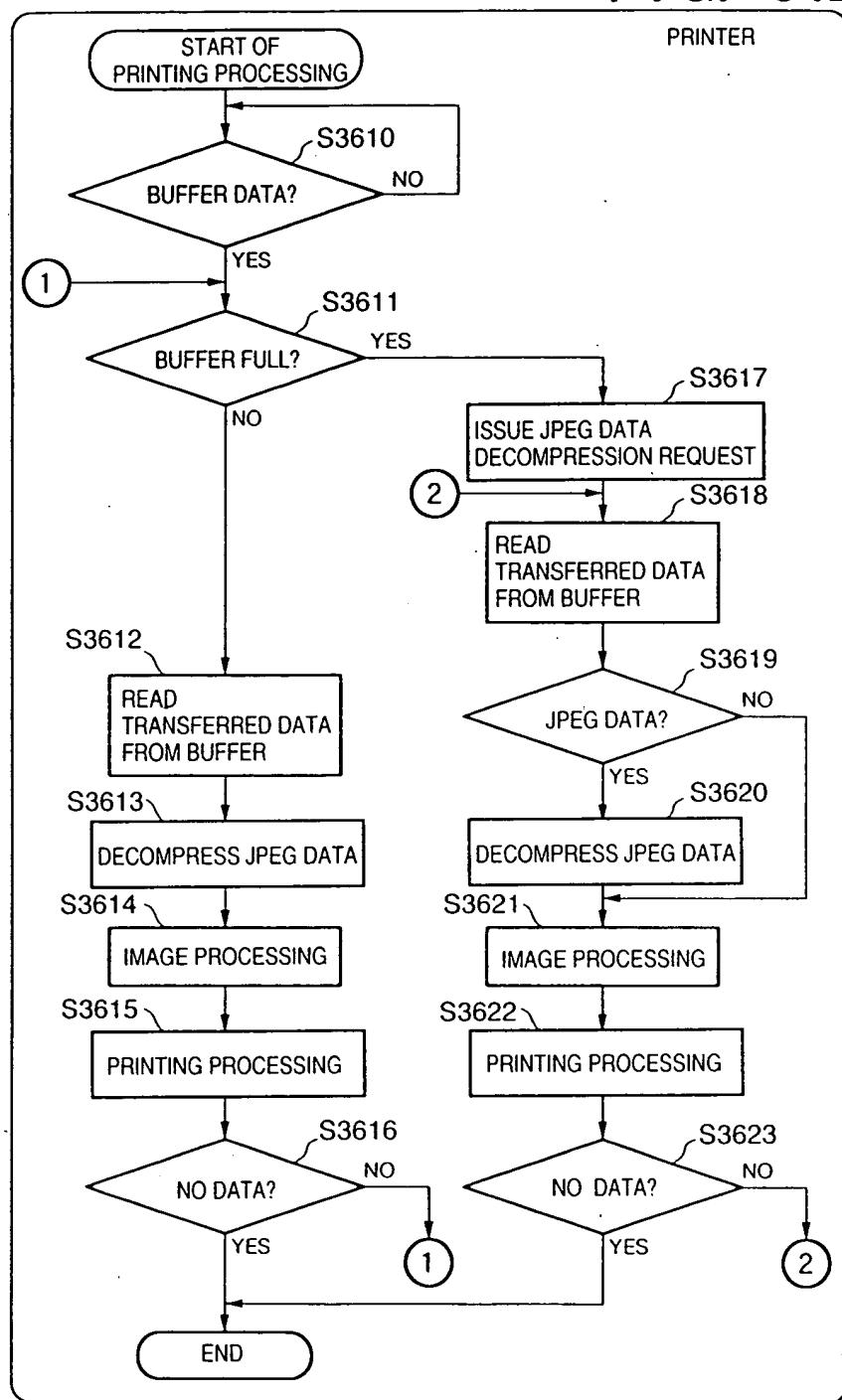
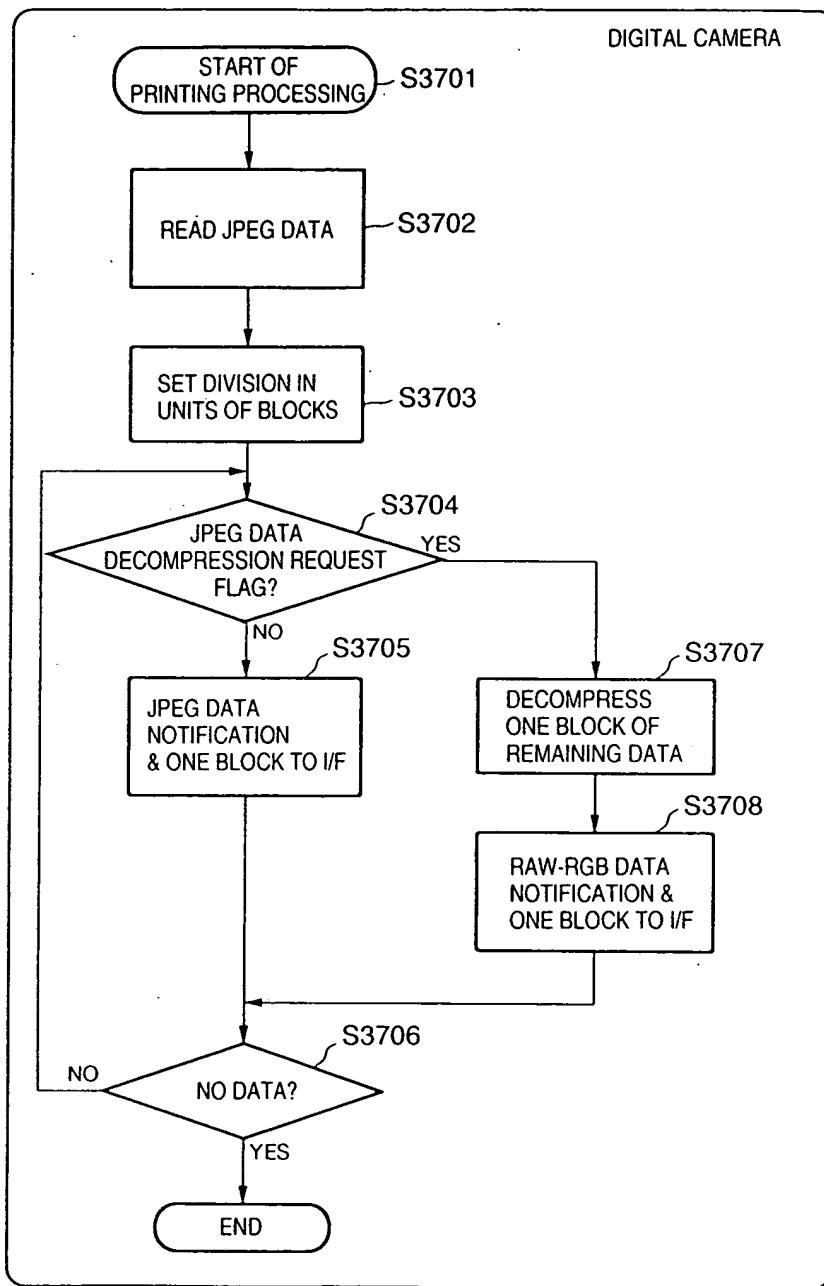


FIG. 35A

00780-66605960



007680-60605960

